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(54) Title: SUPPLEMENTARY VASCULAR CLAMP FOR THE TOOL KIT OF AN OPEN APPROACH STAPLER

(57) Abstract: The present invention relates to medicine, in particular, to clamps used in vascular surgery for occlusion of blood vessels during a surgical operation, such as vascular clamps used in aortic aneurysm repair. The claimed supplementary vascular clamp comprises a pair of pivoting arms, each of them having a proximal end and a distal handle end. Each pivoting arm contains clamping jaws rigidly attached to a respective proximal end of this arm and shaped as a concave semi-cylindrical or semi-oval cavity. The clamping jaws are movable between the open position and closed position and define a through cylindrical or oval cavity in their closed position. The clamping jaws of the vascular clamp are also provided with a tightening means to provide intra-aortal bending of the ends of staples of an open approach stapler. The tightening means is shaped as plates or a strip of resilient material. The strip may be provided with a tensioning device. The vascular clamp may be also provided with a compensating means for correcting non-uniformity in the thickness of aorta walls. The vascular clamp may be further provided with a compensating means for correction of irregularity in wall thickness of the aorta, a first and a second sealing means for providing secure enclosure of aorta walls, as well as a means for providing regular ejection of staples.

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